DEPARTMENT OF THE AIR FORCE
59TH MEDICAL WING (AETC)
JOINT BASE SAN ANTONIO - LACKLAND TEXAS

12 APR 2017

MEMORANDUM FOR SGVT
ATTN: CAPT KATRINA M. LAWRENCE-WOLFF

FROM: 59 MDW/SGVU

SUBJECT: Professional Presentation Approval

1. Your paper, entitled **Hypertensive Crisis in a Young Woman: A Rare Presentation of an Uncommon Disease (poster)** and **New Nerve-racking Neurologic Symptoms** presented at/published to **North American Young Rheumatology Investigator Forum and Clinical Conference of Rheumatology, Destin, Florida, 26-30 April 2017** in accordance with MDWI 41-108, has been approved and assigned local file #**17197.**

2. Pertinent biographic information (name of author(s), title, etc.) has been entered into our computer file. Please advise us (by phone or mail) that your presentation was given. At that time, we will need the date (month, day and year) along with the location of your presentation. It is important to update this information so that we can provide quality support for you, your department, and the Medical Center commander. This information is used to document the scholarly activities of our professional staff and students, which is an essential component of Wilford Hall Ambulatory Surgical Center (WHASC) internship and residency programs.

3. Please know that if you are a Graduate Health Sciences Education student and your department has told you they cannot fund your publication, the 59th Clinical Research Division may pay for your basic journal publishing charges (to include costs for tables and black and white photos). We cannot pay for reprints. If you are a 59 MDW staff member, we can forward your request for funds to the designated Wing POC at the Chief Scientist's Office, Ms. Alice Houy, office phone: 210-292-8029; email address: alice.houy.civ@mail.mil.

4. Congratulations, and thank you for your efforts and time. Your contributions are vital to the medical mission. We look forward to assisting you in your future publication/presentation efforts.

Linda Steel-Goodwin

LINDA STEEL-GOODWIN, Col, USAF, BSC
Director, Clinical Investigations & Research Support

PROCESSING OF PROFESSIONAL MEDICAL RESEARCH/TECHNICAL PUBLICATIONS/PRESENTATIONS

INSTRUCTIONS

USE ONLY THE MOST CURRENT 59 MDW FORM 3039 LOCATED ON AF E-PUBLISHING

1. The author must complete page two of this form:
   a. In Section 2, add the funding source for your study [e.g., 59 MDW CRD Graduate Health Sciences Education (GHSE) (SG5 O&M); SG5 R&D; Tri-Service Nursing Research Program (TSNRP); Defense Medical Research & Development Program (DMRDP); NIH; Congressionally Directed Medical Research Program (CDMRP) ; Grants; etc.]

   b. In Section 2, there may be funding available for journal costs, if your department is not paying for figures, tables or photographs for your publication. Please state "YES" or "NO" in Section 2 of the form, if you need publication funding support.

2. Print your name, rank/grade, sign and date the form in the author's signature block or use an electronic signature.

3. Attach a copy of the 59 MDW IRB or IACUC approval letter for the research related study. If this is a technical publication/presentation, state the type (e.g. case report, QA/QI study, program evaluation study, informational report/briefing, etc.) in the "Protocol Title" box.

4. Attach a copy of your abstract, paper, poster and other supporting documentation.

5. Save and forward, via email, the processing form and all supporting documentation to your unit commander, program director or immediate supervisor for review/approval.

6. On page 2, have either your unit commander, program director or immediate supervisor:
   a. Print their name, rank/grade, title; sign and date the form in the approving authority's signature block or use an electronic signature.

7. Submit your completed form and all supporting documentation to the CRD for processing (59crdpubspres@us.af.mil). **This should be accomplished no later than 30 days before final clearance is required to publish/present your materials.** If you have any questions or concerns, please contact the 59 CRD/Publications and Presentations Section at 292-7141 for assistance.

8. The 59 CRD/Publications and Presentations Section will route the request form to clinical investigations, 502 ISG/JAC (Ethics Review) and Public Affairs (59 MDW/PA) for review and then forward you a final letter of approval or disapproval.

9. Once your manuscript, poster or presentation has been approved for a one-time public release, you may proceed with your publication or presentation submission activities, as stated on this form. **Note:** For each new release of medical research or technical information as a publication/presentation, a new 59 MDW Form 3039 must be submitted for review and approval.

10. If your manuscript is accepted for scientific publication, please contact the 59 CRD/Publications and Presentations Section at 292-7141. This information is reported to the 59 MDW/CC. All medical research or technical information publications/presentations must be reported to the Defense Technical Information Center (DITC). See 59 MDWI 41-108, *Presentation and Publication of Medical and Technical Papers*, for additional information.

11. The Joint Ethics Regulation (JER) DoD 5500.07-R, *Standards of Conduct*, provides standards of ethical conduct for all DoD personnel and their interactions with other non-DoD entities, organizations, societies, conferences, etc. Part of the Form 3039 review and approval process includes a legal ethics review to address any potential conflicts related to DoD personnel participating in non-DoD sponsored conferences, professional meetings, publication/presentation disclosures to domestic and foreign audiences, DoD personnel accepting non-DoD contributions, awards, honoraria, gifts, etc. The specific circumstances for your presentation will determine whether a legal review is necessary. **If you (as the author) or your supervisor check "NO" in block 17 of the Form 3039, your research or technical documents will not be forwarded to the 502 ISG/JAC legal office for an ethics review.** To assist you in making this decision about whether to request a legal review, the following examples are provided as a guideline:

    For presentations before professional societies and like organizations, the 59 MDW Public Affairs Office (PAO) will provide the needed review to ensure proper disclaimers are included and the subject matter of the presentation does not create any cause for DoD concern.

    If the sponsor of a conference or meeting is a DoD entity, an ethics review of your presentation is not required, since the DoD entity is responsible to obtain all approvals for the event.

    If the sponsor of a conference or meeting is a non-DoD commercial entity or an entity seeking to do business with the government, then your presentation should have an ethics review.

    If your travel is being paid for (in whole or in part) by a non-Federal entity (someone other than the government), a legal ethics review is needed. These requests for legal review should come through the 59 MDW Gifts and Grants Office to 502 ISG/JAC.

    If you are receiving an honorarium or payment for speaking, a legal ethics review is required.

    If you (as the author) or your supervisor check "YES" in block 17 of the Form 3039, your research or technical documents will be forwarded simultaneously to the 502 ISG/JAC legal office and PAO for review to help reduce turn-around time. If you have any questions regarding legal reviews, please contact the legal office at (210) 671-5795/3365, DSN 473.

NOTE: All abstracts, papers, posters, etc., should contain the following disclaimer statement:
"The views expressed are those of the [author(s)] [presenter(s)] and do not reflect the official views or policy of the Department of Defense or its Components"

NOTE: All abstracts, papers, posters, etc., should contain the following disclaimer statement for research involving humans:
"The voluntary, fully informed consent of the subjects used in this research was obtained as required by 32 CFR 219 and DODI 3216.02_AFI 40-402."

NOTE: All abstracts, papers, posters, etc., should contain the following disclaimer statement for research involving animals, as required by AFMAN 40-401_IP :
"The experiments reported herein were conducted according to the principles set forth in the National Institute of Health Publication No. 80-23, Guide for the Care and Use of Laboratory Animals and the Animal Welfare Act of 1966, as amended."

PROCESSING OF PROFESSIONAL MEDICAL RESEARCH/TECHNICAL PUBLICATIONS/PRESENTATIONS

1. TO: CLINICAL RESEARCH	2. FROM: (Author's Name, Rank, Grade, Office Symbol)	3. GME/GHSE STUDENT:	4. PROTOCOL NUMBER:
	Lawrence-Wolff, Katrina M O-3, SGVT	☒ YES ☐ NO	NA- case reports

5. PROTOCOL TITLE: (NOTE: For each new release of medical research or technical information as a publication/presentation, a new 59 MDW Form 3039 must be submitted for review and approval.)

NA

6. TITLE OF MATERIAL TO BE PUBLISHED OR PRESENTED:

Hypertensive Crisis in a Young Woman: A Rare Presentation of an Uncommon Disease (poster), New Nerve-racking Neurologic Symptoms (r

7. FUNDING RECEIVED FOR THIS STUDY? ☐ YES ☒ NO FUNDING SOURCE:

8. DO YOU NEED FUNDING SUPPORT FOR PUBLICATION PURPOSES: ☐ YES ☒ NO

9. IS THIS MATERIAL CLASSIFIED? ☐ YES ☒ NO

10. IS THIS MATERIAL SUBJECT TO ANY LEGAL RESTRICTIONS FOR PUBLICATION OR PRESENTATION THROUGH A COLLABORATIVE RESEARCH AND DEVELOPMENT AGREEMENT (CRADA), MATERIAL TRANSFER AGREEMENT (MTA), INTELLECTUAL PROPERTY RIGHTS AGREEMENT ETC.?
☐ YES ☒ NO NOTE: If the answer is YES then attach a copy of the Agreement to the Publications/Presentations Request Form.

11. MATERIAL IS FOR: ☒ DOMESTIC RELEASE ☐ FOREIGN RELEASE
CHECK APPROPRIATE BOX OR BOXES FOR APPROVAL WITH THIS REQUEST. ATTACH COPY OF MATERIAL TO BE PUBLISHED/PRESENTED.

☐ 11a. PUBLICATION/JOURNAL (List intended publication/journal.)

☐ 11b. PUBLISHED ABSTRACT (List intended journal.)

☒ 11c. POSTER (To be demonstrated at meeting: name of meeting, city, state, and date of meeting.)
North American Young Rheumatology Investigator Forum and Clinical Conference of Rheumatology, Destin, Florida, 26-30 April 2017

☒ 11d. PLATFORM PRESENTATION (At civilian institutions: name of meeting, state, and date of meting.)
North American Young Rheumatology Investigator Forum and Clinical Conference of Rheumatology, Destin, Florida, 26-30 April 2017

☐ 11e. OTHER (Describe: name of meeting, city, state, and date of meeting.)

12. HAVE YOUR ATTACHED RESEARCH/TECHNICAL MATERIALS BEEN PREVIOUSLY APPROVED TO BE PUBLISHED/PRESENTED?
☐ YES ☒ NO ASSIGNED FILE # _____ DATE _____

13. EXPECTED DATE WHEN YOU WILL NEED THE CRD TO SUBMIT YOUR CLEARED PRESENTATION/PUBLICATION TO DTIC
NOTE: All publications/presentations are required to be placed in the Defense Technical Information Center (DTIC).

DATE	
10 April 2017	

14. 59 MDW PRIMARY POINT OF CONTACT (Last Name, First Name, M.I., email)	15. DUTY PHONE/PAGER NUMBER
Lawrence-Wolff, Katrina M katrina.m.lawrencewolff.mil@mail.mil	210-916-0797

16. AUTHORSHIP AND CO-AUTHOR(S) List in the order they will appear in the manuscript.

LAST NAME, FIRST NAME AND M.I.	GRADE/RANK	SQUADRON/GROUP/OFFICE SYMBOL	INSTITUTION (If not 59 MDW)
a. Primary/Corresponding Author Lawrence-Wolff, Katrina	O-3	959 CSPS	
b.			
c.			
d.			
e.			

17. IS A 502 IBG/IAC ETHICS REVIEW REQUIRED (JER DOD 5500.07-R)? ☐ YES ☒ NO

I CERTIFY ANY HUMAN OR ANIMAL RESEARCH RELATED STUDIES WERE APPROVED AND PERFORMED IN STRICT ACCORDANCE WITH 32 CFR 219, AFMAN 40-401_IP, AND 59 MDWI 41-108. I HAVE READ THE FINAL VERSION OF THE ATTACHED MATERIAL AND CERTIFY THAT IT IS AN ACCURATE MANUSCRIPT FOR PUBLICATION AND/OR PRESENTATION.

18. AUTHOR'S PRINTED NAME, RANK, GRADE	19. AUTHOR'S SIGNATURE	20. DATE
Katrina Lawrence-Wolff, O-3	[redacted]	4 April 2017
21. APPROVING AUTHORITY'S PRINTED NAME, RANK, TITLE	22. APPROVING AUTHORITY'S SIGNATURE	23. DATE
Daniel F. Battafarano, DO, GP15, Rheumatology Program Director	[redacted]	7 April 2017

PROCESSING OF PROFESSIONAL MEDICAL RESEARCH/TECHNICAL PUBLICATIONS/PRESENTATIONS

1st ENDORSEMENT (59 MDW/SGVU Use Only)

TO: Clinical Research Division 59 MDW/CRD Contact 292-7141 for email instructions.	24. DATE RECEIVED April 07, 2017	25. ASSIGNED PROCESSING REQUEST FILE NUMBER 17197
26. DATE REVIEWED 10 Apr 2017		27. DATE FORWARDED TO 502 ISG/JAC

28. AUTHOR CONTACTED FOR RECOMMENDED OR NECESSARY CHANGES: ☒ NO ☐ YES If yes, give date. _____ ☐ N/A

29. COMMENTS ☒ APPROVED ☐ DISAPPROVED

The case study is approved.

30. PRINTED NAME, RANK/GRADE, TITLE OF REVIEWER	31. REVIEWER SIGNATURE	32. DATE
Rocky Calcote, PhD, Clinical Research Administrator	CALCOTE.ROCKY.D.1178245844	

2nd ENDORSEMENT (502 ISG/JAC Use Only)

33. DATE RECEIVED	34. DATE FORWARDED TO 59 MDW/PA

35. COMMENTS ☐ APPROVED (In compliance with security and policy review directives.) ☐ DISAPPROVED

36. PRINTED NAME, RANK/GRADE, TITLE OF REVIEWER	37. REVIEWER SIGNATURE	38. DATE

3rd ENDORSEMENT (59 MDW/PA Use Only)

39. DATE RECEIVED	40. DATE FORWARDED TO 59 MDW/SGVU
April 11, 2017	April 12, 2017

41. COMMENTS ☒ APPROVED (In compliance with security and policy review directives.) ☐ DISAPPROVED

Please add disclaimer to your presentation.
"The Views expressed are those of the [author(s)] [presenter(s)] and do not reflect the official views or policy of the Department of Defense or its Components"
Once added, presentations are approved and cleared for public release by Public Affairs.

42. PRINTED NAME, RANK/GRADE, TITLE OF REVIEWER	43. REVIEWER SIGNATURE	44. DATE
Kevin Iinuma, SSgt/E-5, 59 MDW Public Affairs	IINUMA.KEVIN.MITSUGU.1296227 513	April 12, 2017

4th ENDORSEMENT (59 MDW/SGVU Use Only)

45. DATE RECEIVED	46. SENIOR AUTHOR NOTIFIED BY PHONE OF APPROVAL OR DISAPPROVAL ☐ YES ☐ NO ☐ COULD NOT BE REACHED ☐ LEFT MESSAGE

47. COMMENTS ☐ APPROVED ☐ DISAPPROVED

48. PRINTED NAME, RANK/GRADE, TITLE OF REVIEWER	49. REVIEWER SIGNATURE	50. DATE

Title: **Hypertensive Crisis in a Young Woman: A Rare Presentation of an Uncommon Disease**

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Disclosure:

I have no financial disclosures. "The view(s) expressed herein are those of the author(s) and do not reflect the official policy or position of Brooke Army Medical Center, the U.S. Army Medical Department, the U.S. Army Office of the Surgeon General, the Department of the Air Force, the Department of the Army or the Department of Defense or the U.S. Government."

The views expressed are those of the author(s)/presenter(s) and do not reflect the official views or policy of the Department of Defense or its Components.

Introduction:

Hypertensive emergency is an uncommon presentation of rheumatic disease but can be seen in disorders affecting the renal arteries and kidneys. Takayasu arteritis is a large vessel vasculitis affecting young females classically presenting with claudication, systemic illness and asymmetric blood pressures. We describe a young, African American female who presented with hypertensive emergency, altered mental status and seizure then found to have abdominal aortitis and bilateral renal artery stenosis consistent with type IV Takayasu arteritis.

Case Description:

A 22 year old African American female with past medical history of mild developmental delay developed increasing fatigue and 20 pound weight loss over two months. She then presented with a headache, grand mal seizure and altered mental status prompting ICU admission. Admission blood pressure was 218/130 and equal in all extremities. Severe hypertension required IV Cardene management. MRI and CT brain demonstrated changes consistent with recent seizure but no focal lesions or bleeding. CT evaluation of chest and abdomen demonstrated circumferential thickening of the abdominal aortal at the level of the renal arteries, extending to the bifurcation. WBC was 18, Hgb was 11 and platelets were 393K. ESR and CRP were 70 and 4.0 respectively. She had an ANA of 1:80 in a speckled pattern. IgG4 sub-classes were normal. Serum creatinine was 1.37 with 1.3 grams of protein/24 hours. Laboratory evaluation of metanephrines, aldosterone and renin was unremarkable. Her initial Indian Takayasu Activity Score (ITAS) was 9. She did not meet ACR 1990 Adult classification criteria but met EULAR/PRINTO/PRES pediatric criteria for Takayasu arteritis with abnormal imaging, elevated inflammatory markers and

hypertension. She was started on oral anti-hypertensives and high dose prednisone followed by Infliximab. She has not required vascular bypass, stenting or other interventions.

Discussion:
The overall estimated prevalence of Takayasu arteritis in the US is 2.6 cases per million adults. Takayasu arteritis is a large vessel vasculitis primary affecting young adult females involving the aortic arch and upper extremities. Hypertension, fatigue and headache are early manifestations of adult Takayasu arteritis followed by asymmetric blood pressure and claudication. Pediatric cases often involve the abdominal aorta and renal arteries but hypertensive crisis is uncommon.

Conclusion:
Our patient's acute mental status changes and severe hypertensive crisis was a highly unusual presentation for adult Takayasu arteritis. Her symptoms were most consistent with a pediatric Takayasu arteritis type IV presentation which is unfamiliar to most adult rheumatologists. This patient responded to aggressive corticosteroid and antihypertensive therapy at onset and is clinical stable on Infliximab infusions.

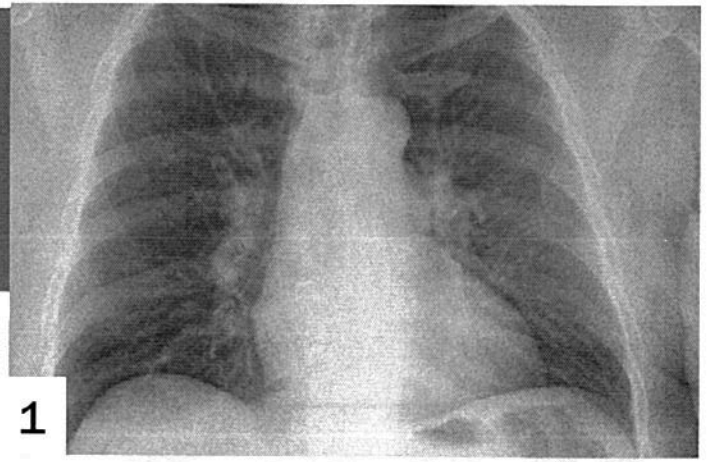
THIEVES' MARKET 2017

New Nerve-racking Neurologic Symptoms

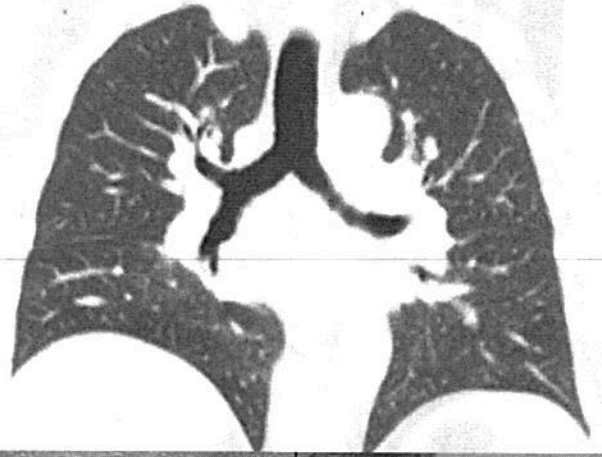
BACKGROUND

- A 56 y/o female with sarcoidosis manifested by hilar adenopathy (figures 1&2) and lupus pernio (figures 3&4) treated with Adalimumab x 2 months followed by new onset, progressive, ascending lower extremity weakness

- **Pertinent past medical and surgical history:**
  - ER/PR + Breast cancer (stage III) in 2013
  - Bilateral mastectomy and lymph node dissection
  - Polyneuropathy from Adriamycin and CTX
  - Partial thyroidectomy



1



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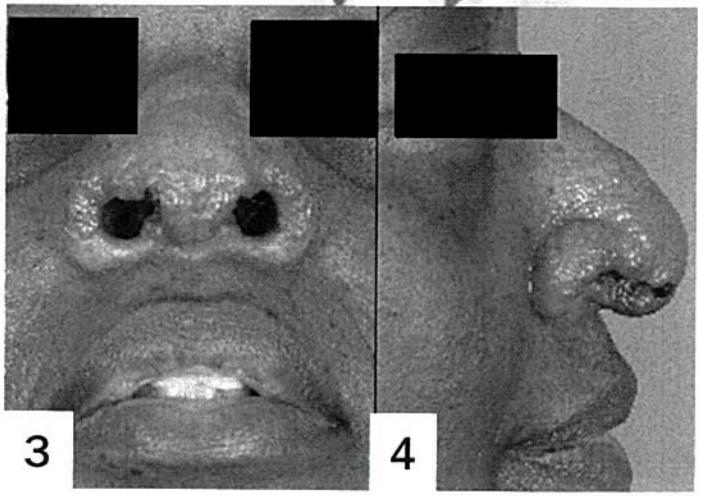

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SUMMARY OF EVALUATION

- **Hospitalization 1:**
  - LP
    - Negative cytology
    - Negative culture
    - Elevated protein (500g)
  - Normal nerve conduction studies
  - MRI brain-
    - Enhancement of cranial nerves and increased ventricular volume
  - MRI spine-
    - Without evidence of demyelination, mass or abscess

Audience Participation

What is the most likely cause of her weakness?

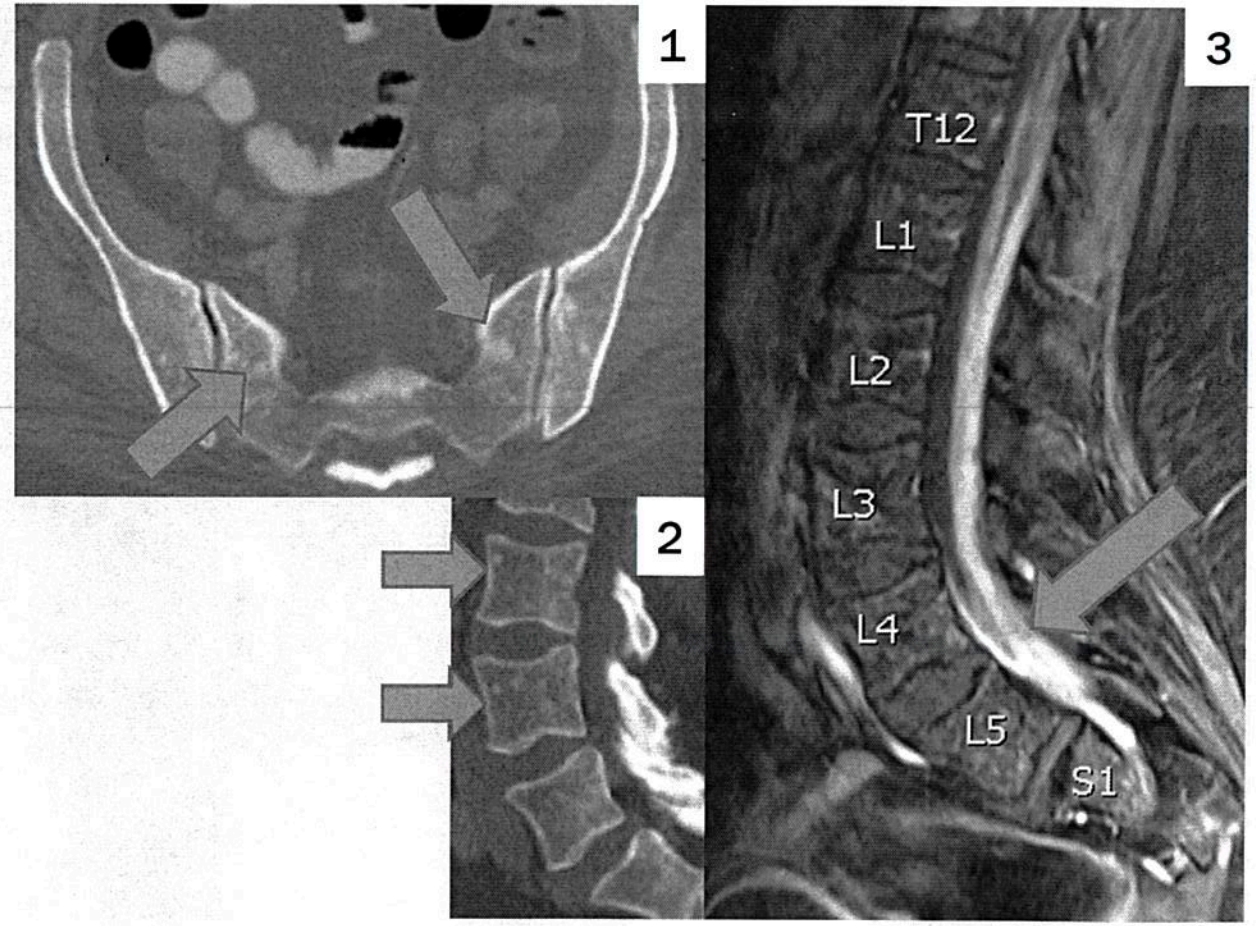
- A. Guillen-Barre Syndrome
- B. Anti-TNF side effect
- C. Neurosarcoidosis
- D. Infection
- E. Metastatic Cancer

INTERVAL EVENTS

- Neurosarcoidosis suspected as etiology for new symptoms with no evidence of cancer, infection or demyelination
- Patient received monthly Infliximab (5mg/kg x 4 weeks) x 3 months with resolution of lupus pernio
- Lupus pernio flared and Infliximab dose was increased to 7mg/kg
- Relapse of lower extremity weakness complicated by urinary retention and saddle anesthesia
  - Admitted to the hospital and started on high dose steroids (1mg/kg)

SUMMARY OF EVALUATION

- Hospitalization 2
  - LP #2
    - Negative cytology
    - Negative culture
    - 18 cells
    - >2g protein
  - MRI Spine
    - Enhancement of meninges, no cauda equina (Figure 3)
  - CT Spine/Pelvis
    - Multiple sclerotic bony lesions within the pelvis and vertebral bodies (Figures 1,2)

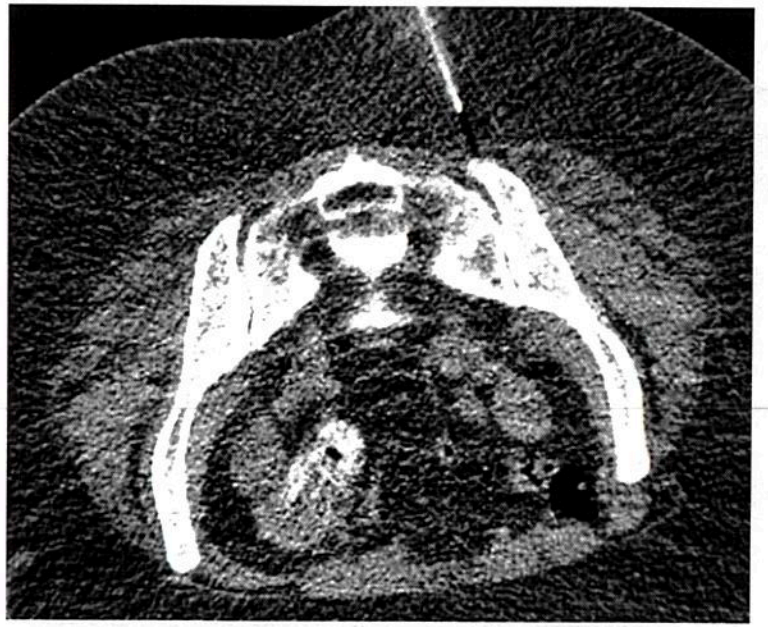


AUDIENCE RESPONSE QUESTION

What is the most likely etiology for the neurological deficits and imaging findings?

- A. Neurosarcoidosis
- B. Metastatic cancer
- C. Anti-TNF side effect
- D. Disseminated mycobacterium infection
- E. Multiple myeloma

WORK UP AND THERAPY



- **Ilium Bone Biopsy**
  - -Sclerotic infiltrative process
  - Poorly differentiated tumor cells
  - Immunohistochemical profile and histologic features are compatible with a poorly differentiated metastatic carcinoma of mammary origin

- **LP #3**
  - Cytology + for GATA-3[1] staining, atypical cells, consistent with carcinoma

- **Treatment**
  - Discontinued Infliximab
  - Continue high dose steroids (1mg/kg)
  - Oncology consultation

1. GATA-3 is a transcription factor involved in differentiation of breast tissue and has been posited to be a useful marker in detecting metastatic mammary carcinoma.

SUMMARY

- Although initially treated for new onset Neurosarcoidosis, our patient was ultimately diagnosed with metastatic breast cancer as the etiology of the neurologic complaints and imaging abnormalities

- Our patient's diagnosis was not made until 6 months after onset of initial neurologic symptoms

CONCLUSION

- Metastatic malignancy may mimic progression of sarcoidosis, Anti-TNF side effects and infection, creating a diagnostic dilemma
- Thorough reevaluation of persistent and worsening symptoms despite Infliximab infusions was crucial in arriving upon the correct diagnosis
- Bone biopsy was essential for the diagnosis of her metastatic cancer

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